

REMARKS

Claims 1-6 and 21-24 were cancelled previously. Claims 7-20, 25 and 26 are rejected in the current Office Action. Claims 7 and 15 are currently amended.

Applicants thank the Examiner for the withdrawal of the rejection of claims 7-20, 25 and 26 under 35 U.S.C. 112, first paragraph, the withdrawal of the rejection of claims 14-20, 25 and 26 under 35 U.S.C. 112 second paragraph, and the withdrawal of the rejection of claims 7, 8, 10, 11, and 14-18 under 35 U.S.C. 102(b).

In the Office Action, claims 7 and 15-20 were rejected under 35 U.S.C. 112, second paragraph for indefiniteness. Claim 7 contained language which was deemed to render the claim vague. Applicants have amended the claim to remove the term “an” so that the claim properly reads as “one adjacent corral.” Claims 15-20 were rejected for the relative term in claim 15 “sufficiently small.” Applicants have amended the claim not in acquiescence to the rejection but to further Applicants’ patent goals. Applicants believe that claims 7 and 15-20 are now definite and the rejection should be withdrawn.

In the Office Action, the obviousness argument made by the Examiner is improper. Boxer is cited as the primary 103 reference, but lacks two elements. “To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

As stated by the Office on page 7,

- 1.) “Boxer does not appear to explicitly disclose arrays of adjacent membrane corrals.”
- 2.) “Boxer does not appear to explicitly teach different proteins as dopants that are different [from] the dopant from at least one other corral.”

The Examiner looks to the prior art to find these two elements, the first missing element in Cremer and the second one in Grakoui.

Under MPEP 2112 the Examiner must provide a rationale or evidence tending to show inherency. Under MPEP 2112 IV the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.

Further, those missing elements are not actually in Cremer and Grakoui, although the Examiner attempts to show that they are.

Cremer shows selective incorporation of a protein receptor into dyed membranes in glass wells. The reference does not disclose arrays of adjacent membrane corrals, especially since a corral is a barrier on a flat surface, and Cremer uses glass wells.

In Grakoui, antigen presenting cells are replaced with planar bilayers of MHC-peptide and ICAM-1. But, Grakoui does not have missing element #1 (adjacent membrane corrals), and thus cannot support element #2 – membrane proteins used as dopants from at least one other corral. There are no corrals in Grakoui.

Thus, although according to the Examiner, Boxer does not appear to “explicitly disclose arrays of adjacent membrane corrals” and does not appear to specifically teach “different membrane protein dopants in different corrals”, the cited art (Cremer and Grakoui) does not make those missing elements inherently present or possible in Boxer.

The Boxer system does not explicitly disclose Applicants invention, and the cited secondary art does not support inherency. The missing descriptive matter is not necessarily present in the references cited.

Furthermore, “[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

The Office Action alleges only that it would have been obvious to make and use the claimed methods comprising arrays of adjacent membrane corrals having different membrane dopants from at least one other corral “because Cremer et al. teaches the use of arrays of corralled lipid bilayers in screening assays and because Grakoui et al. teach the use of supported membranes displaying different membrane protein as effective artificial surfaces.”

Applicants disagree with this analysis. The claimed method does not necessarily flow from the prior art because Cremer does not teach the missing element of adjacent membrane corrals *on one single surface* as alleged by the Examiner, and Grakoui et al. does not teach the missing element of different membrane protein dopants *that are different from at least one other corral*. Thus the Office has not shown that the allegedly inherent missing elements necessarily

flow from the teachings of the prior art for a finding of obviousness. Therefore, Applicants submit that the claims are not obvious over the prior art and the rejection should be withdrawn.

CONCLUSION

Applicants submit that and the rejections should be withdrawn all claims are allowable. Accordingly, Applicants respectfully request passing the pending claims to issue.

An extension of time of one month is attached. Applicants believe that a fee of \$65 is due. The Commissioner is authorized to deduct the fee and any necessary fee required by this amendment, from Deposit Account 12-0690.

If a telephone conference would expedite prosecution, the Examiner is encouraged call the undersigned at (510) 495-2456.

Date: 1 June 2009

Respectfully submitted,

/ Michelle Chew Wong/

Michelle Chew Wong

Reg. No. 50,456

Lawrence Berkeley National Laboratory

One Cyclotron Road, Mail Stop 56A-120

Berkeley, CA 94720

(510) 495-2456 (direct); (510) 486-7058 (office)